

Appl. No. 09/916,232  
Amdt. Dated September 3, 2004  
Reply to Office Action of May 6, 2004

### **REMARKS**

Applicant will now in turn address the concerns and comments of the Examiner as detailed in the present Office Action.

#### **Drawings:**

The Examiner states that the subject matter of this application admits of illustration by a drawing to facilitate the understanding of the invention and that Applicant is required to furnish a drawing under 37 CFR 1.81 and that no new matter may be introduced in the required drawing.

Applicant respectfully submits that the drawings – as currently amended – are sufficient to illustrated the subject matter of the invention. Without more, Applicant believes that all necessary drawings are currently submitted.

#### **Information Disclosure Statements:**

The Examiner avers that the IDS – as listed in the Office Action – fail to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 CFR 1.97(e). The Examiner indicates that the IDS have been placed in the file; but that the information referred to therein has not been considered.

Applicant respectfully traverses this objection. As all of the aforementioned IDS's *pre-date* the mailing of the first Office Action on the merits in this application,

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Applicant respectfully submits that these IDS were properly submitted under 37 CFR 1.97 (b)(2) – and that 37 CFR 1.97(c) does not apply. As such, the statement under 37 CFR 1.97(e) is not required for these IDS submissions. Applicant is submitting courtesy copies of the IDS Form 1449 that were previously submitted in this case – as Exhibit A. Applicant respectfully requests that the Examiner re-examine the case in light of all of the references made of record in this case.

In addition, Applicant – together with this Response – files an additional IDS under 37 CFR 1.97(c) – with the appropriate fee as specified in 1.97(c)(2).

**Claims Rejections under 35 USC 103:**

Applicant notes with appreciation that the Examiner has allowed Claims 1-22, 28-45 and 50-81 over the prior art of record in the case.

The Examiner rejects Claims 23-27, 46-49 and 82-86 as being unpatentable over US Patent Number 6,144,352 (hereinafter Matsuda).

Specifically, the Examiner avers that Matsuda teaches an arrangement of LEDs in each light emitting block of red color signal, green color signal and blue color signal where the arrangement of Fig. 2A (10) is consisting of two pixels, first pixel and second pixel. The arrangement can be divided into four different quadrants where the blue color is at the center of the quadrants disposed at the origin of an X and Y coordinates system forming a first, a second, a third, and fourth quadrant corresponding to providing a three-color pixel element comprising first and second pixel rows, each pixel row

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including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row, wherein a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row, wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows and wherein adjacent horizontal pairs of said three-color pixel elements are vertically offset from one another by one said pixel row; and driving said blue emitters, said red emitters, and said green emitters, wherein said blue emitters of said three-color pixel element is coupled to a pair of blue emitters of a next-nearest neighboring three-color pixel element.

The Examiner states that the prior art does not explicitly teach a left and a right unit area polygon, a blue emitter square shape, and L-shaped green and red emitters. The prior art teaches an arrangement of LEDs in each light emitting block of red color signal, green color signal and blue signal where the arrangement of Fig. 2A (10) is consisting of two pixels, first pixel and second pixel.

The Examiner thereby concludes that it would have been obvious to a person of ordinary skill in the art to modify the arrangement of LEDs in each light emitting block of red color signal, green color signal, and blue signal where the arrangement of Fig. 2A (10) to achieve the function of a left and a right unit area polygon, a blue emitter square shaped, and L-shaped green and red emitters because it would provide an LED display

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device includes an LED display section including a plurality of light emitting blocks arranged in a matrix, each light emitting block including at least a red LED, a green LED, and a blue LED and it is also obvious a person of ordinary skill in the art to know if two devices can perform the same function their shape does not matter.

Applicant respectfully traverses the rejection.

As for Claims 23 and 46, as currently amended, these claims comprise the limitation: "wherein at least two blue emitters of at least two three-color pixel elements are connected to a same data driver."

As for Claim 82, among the many claim limitations therein, one of the limitations is that "wherein said blue emitter of said three-color pixel element is coupled to a blue emitter of a next nearest neighboring three-color pixel element."

Although the Examiner states that Matsuda teaches that such coupling between neighboring or next nearest neighboring blue emitters, Applicant's review of Matsuda shows no such teaching exists in Matsuda. Matsuda is concerned primarily with the mismatch between chromaticity values for the three primary colors – R, G, and B – that is found in television signals and those chromaticity values offered by LEDs that would comprise a display that would presumably render such television signals. Thus, Matsuda is primarily concerned with systems and methods of control of blending red and green light from the LEDs to more accurately match the red and green image data values from the television signal.

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By contrast, the present invention concerns itself, at least in part, together with other aspects, with unique subpixel layouts and backplane implementations that may improve resolution and reduce cost. Thus, the limitation of coupling at least two blue emitters serves to potential reduce the cost in a backplane implementation of the display panel. Sharing of drivers by the blue emitters reduces the overall cost of drivers for a given panel.

Nowhere in Matsuda is there any teaching, suggestion or disclosure for the sharing of such drivers by blue emitters. As such, Applicant respectfully submits that Claims 23-27, 46-49, and 82-86 are in condition for allowance and the same is respectfully requested.

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**Conclusion**

In view of the foregoing amendments and remarks, Applicant respectfully submits that all pending Claims are patentable over the cited art of record and are in condition for allowance. Therefore, Applicant requests the Examiner to reconsider and withdraw the outstanding rejection and pass this application to allowance.

If the Examiner believes a telephone conference would expedite the allowance of the claims, the Examiner is invited to contact Stuart P. Kaler at (707) 824-2487.

Respectfully submitted,

Dated: 3 Sept 2004

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